

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number
WO 2005/079434 A3

(51) International Patent Classification: C12Q 1/00,
G01N 33/53, A61K 38/00, C07K 1/00, 2/00, 4/00, 5/00,
7/00, 14/00, 16/00, 17/00

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:
PCT/US2005/004968

(22) International Filing Date:
17 February 2005 (17.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/545,185 17 February 2004 (17.02.2004) US

(71) Applicant (for all designated States except US): THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL [US/US]; 308 Bynum Hall, Campus Box 4105, Chapel Hill, NC 27599-4105 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): THREADGILL, David [US/US]; 1503 Arboretum Drive, Chapel Hill, NC 27517 (US). LEE, Daekee [KR/US]; 209-8 Corner Drive, Chapel Hill, NC 27514 (US).

(74) Agent: TAYLOR, Arles, A., Jr.; Jenkins, Wilson & Taylor, P.A., University Tower, Suite 1400, 3100 Tower Boulevard, Durham, NC 27707 (US).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
6 April 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/079434 A3

(54) Title: MODULATION OF EPIDERMAL GROWTH FACTOR HETERODIMER ACTIVITY

(57) Abstract: Provided is a method for screening a plurality of compounds for an ability to bind to a heterodimer of EGFR and another ERBB family member. Also provided are compounds that bind to heterodimers of EGFR and another ERBB family member; and methods of using the identified compounds to suppress the growth of a tumor associated with EGFR heterodimer activity in a subject.